

ABSTRACT

An electronic imaging system for capturing an image of a scene includes an optical system for producing an optical image of the scene, an
5 imaging sensor having a surface in optical communication with the optical system, and a plurality of imaging elements distributed on the surface of the imaging sensor according to a distribution representable by a nonlinear function in which the relative density of the distributed imaging elements is greater toward the center of the sensor. Such a distribution provides physical coordinates for the
10 imaging elements corresponding to a projection of the scene onto a non-planar surface, thereby compensating for perspective distortion of the scene onto the non-planar surface and alleviating the need to perform geometric warping of the images after they have been captured.

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